

## **ISSUES AND RECOMMENDED IMPROVEMENTS**

Through field work, assessment of existing conditions data and meetings with area residents, the Study Team compiled the following list of issues and recommended improvements for the entire study area. These issues represent the most pressing concerns and needs for improving safety and traffic operations.

The issues are listed by roadway, and then by intersection/area. They are presented as follows:

- Issue – states the concern, problem or need for improvement.
- Preliminary Improvement(s) – various solutions that could potentially address the issue. This section includes a description of all the improvements considered in the evaluation. Based on the evaluation of alternatives, some of the preliminary improvements may not be recommended for implementation.
- Evaluation – analysis and reporting of findings.
- Recommendation – improvements to be implemented.

All improvements are short-term unless otherwise indicated.

Area-wide changes to traffic signal timing and phasing are evaluated and discussed at the end of this section. Individual intersection improvements were evaluated and recommended, and then the signal network was optimized as a whole.

### **FOXHALL ROAD**

#### **Issue:**

- Traffic flow and safety concerns at the intersection of Canal Road and Foxhall Road. Figure 18 illustrates the lack of pavement markings on Canal Road.

#### **Preliminary Improvement(s):**

1. Prohibit right turns from inbound Foxhall Road to outbound Canal Road.
2. Prohibit U-turns on eastbound Canal Road. Place appropriate traffic control signs.
3. Place lane markings on westbound Canal Road.

#### **Evaluation:**

1. Prohibiting right turns will improve safety, particularly during off-peak hours, when wide right turns encroach onto the inbound lanes of Canal Road. Delay for the inbound approach of Foxhall Road would also decrease due to the elimination of this slow turning movement.
2. Prohibiting U-turns will improve safety and decrease overall intersection delay. TSA staff observed numerous U-turns during field visits. Some vehicles actually made three-point turns when they were unable to make the U-turn.
3. Pavement markings have been added to this section of Canal Road.

#### **Recommendation:**

- Implement all the preliminary improvements noted above, i.e. prohibit discussed turns.

**Figure 18**  
*Facing East on Canal Road at Foxhall Road*



**Issue:**

- Cut-through traffic on 44<sup>th</sup> street at Foxhall Road/MacArthur Boulevard

**Preliminary Improvement(s):**

1. Figure 19 shows the “No Left Turn” signs that have been installed on southbound Foxhall Road at several intersections between Reservoir Road and 44<sup>th</sup> Street to prevent drivers from using 44<sup>th</sup> Street as a bypass to Foxhall Road.

**Evaluation:**

1. The new signs have reduced the amount of cut-through traffic.

**Recommendation:**

- This improvement has already been implemented and has been successful.

**Issue:**

- 44<sup>th</sup> Street traffic blocking intersection with MacArthur Boulevard

**Preliminary Improvement(s):**

1. Retime signal, allowing 44<sup>th</sup> Street traffic to travel directly down Foxhall Road towards Canal Road.
2. Long-Term: Construct grade separation or traffic circle.

**Figure 19**  
*Southbound Foxhall Road Near Q Street*



**Evaluation:**

1. Retiming the signal in this manner would take away from green time that is currently given to MacArthur Boulevard, which has a much higher traffic volume than 44<sup>th</sup> Street. Allotting this green time to 44<sup>th</sup> Street would increase queuing and delay on MacArthur Boulevard. Additionally, this would encourage commuters to use 44<sup>th</sup> Street as a cut-through route.
2. The construction of grade separation or a traffic circle at this intersection would have an exorbitant cost. The high cost would result from the extensive right-of-way requirements and topography constraints. Furthermore, the construction of a massive structure for an interchange would not fit well with the architectural character of the surrounding residential community.

**Recommendation:**

- Do not retime this signal. Do not construct a traffic circle or grade separation.

**Issue:**

- The signing and marking for the left lane on Foxhall Road at MacArthur Boulevard is inadequate.

**Preliminary Improvement(s):**

1. Install "Left Lane Must Turn Left" sign in the median of Foxhall Road located at the Canal Road intersection.
2. Extend solid white lane stripe 120 feet past current terminus.

3. Place additional left turn arrow 80 feet before existing arrow.
4. Add "ONLY" legend to all pavement marking arrows.
5. Replace "Turn Left on Green with Caution" sign with the following sign:



This sign is compliant with the *Manual on Uniform Traffic Control Devices* (MUTCD).

**Evaluation:**

1. The new sign will alert drivers unfamiliar with the area that they are in an exclusive turning lane.
2. The new striping will give additional reinforcement to the exclusive left turn lane.
3. The left turn arrow will reinforce the message to the drivers.
4. The addition of "ONLY" will reinforce the message to the drivers.
5. MUTCD-compliant signs are more familiar to drivers and should be used whenever possible.

**Recommendation:**

- Implement all of the preliminary improvements noted above, i.e. Install/replace signs and add pavement markings.

**Issue:**

- Vehicular congestion on northbound Foxhall at Reservoir Road.

**Preliminary Improvement(s):**

1. Implement AM peak hour parking restrictions on northbound Foxhall Road north of Q Street. Stripe Foxhall Road as two lanes.

**Evaluation:**

1. Removing this parking and creating a second lane will increase capacity on northbound Foxhall Road, reducing delay at the intersection of Foxhall and Reservoir Roads and also reducing the length of the queue on northbound Foxhall Road. This would result in the elimination of some metered parking on Foxhall Road.

**Recommendation:**

- Eliminate parking to provide second northbound lane during the AM peak period (7:00 AM – 9:30 AM).

**Issue:**

- Traffic operations, condition of existing striping and pedestrian safety at the intersection of Foxhall and Reservoir Roads.

**Preliminary Improvement(s):**

1. Restripe all pavement markings.
2. Two potential lane configuration options were considered for this intersection:
  - A. Add one exclusive eastbound left turn lane on Reservoir Road. Re-stripe the eastbound approach to use three eastbound lanes on Reservoir Road – one left turn lane, one through lane and one through-right lane. Prohibit parking on eastbound Reservoir Road for the first 300 feet east of Foxhall Road.
  - B. Add one exclusive eastbound left turn lane on Reservoir Road. Re-stripe the eastbound approach to use three eastbound lanes on Reservoir Road, one left turn lane, one through lane and one right turn lane.
3. Change the existing signal phasing and adjust the signal timing to accommodate the change in signal phasing.
4. Convert Salem Lane to one-way eastbound between Foxhall Road and 45<sup>th</sup> Street.
5. Construct sidewalk on east side of Foxhall Road from Hoban Road to Reservoir Road.
6. Install "yield to pedestrians while turning" sign (like on eastbound approach) for westbound right turns.
7. Eliminate 200 feet of parking on the north side of Reservoir Road west of Foxhall Road.
8. Replace the signalized intersection with a roundabout.

**Evaluation:**

1. All pavement markings at this intersection are in poor condition. Replacing them will improve visibility and safety.
2. Figure 20 is an aerial photograph of the intersection of Foxhall and Reservoir Roads, with an overlay showing the existing lane configuration, pavement markings and islands/medians. Under existing conditions, this intersection operates at LOS F for both the AM and PM peak hours.

There are three predominant reasons for the poor level of service:

- Eastbound left turns block through traffic.
  - Lack of capacity on northbound Foxhall Road.
  - Split-phase timing on Foxhall Road.
- A. By reconfiguring eastbound Reservoir Road to provide three lanes – an exclusive left lane, an exclusive through lane and a shared through/right lane – traffic queued to make the left turn onto northbound Foxhall Road would no longer block through traffic continuing on Reservoir Road. The two eastbound through lanes provide capacity to allow the intersection to operate at LOS E during the AM and PM peak hours. This option is shown in Figure 21.

In order to safely provide for two eastbound through lanes on Reservoir Road, a distance of 300 feet on the south side of Reservoir Road, east of Foxhall Road, should have no parking. The residents of the surrounding community indicated to the Study Team that the elimination of parking spaces on